



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,999	02/16/2001	Jay E. Uglow	LAMP1P106A	2171

25920 7590 10/22/2002

MARTINE & PENILLA, LLP
710 LAKEWAY DRIVE
SUITE 170
SUNNYVALE, CA 94085

EXAMINER

PHAM, THANHHA S

ART UNIT PAPER NUMBER

2813

DATE MAILED: 10/22/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/785,999

Applicant(s)

UGLOW ET AL.

Examiner

Thanhha Pham

Art Unit

2813

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 September 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-16 and 26.

Claim(s) withdrawn from consideration: _____

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____

Carl Whitehead, Jr.
CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Continuation of 3. Applicant's reply has overcome the following rejection(s): Rejection under 35 U.S.C 112, Rejection under 35 U.S.C. 102(e) as anticipated by Jain [US 5,821,168] .

Continuation of 5. does NOT place the application in condition for allowance because:

Contradict to Applicant's argument on page 10, Smith discloses a trench layer of a low dielectric constant layer (430, fluorinated parylene, col 3 lines 56-62) over a via layer of inorganic dielectric silicon dioxide (424, silicon dioxide by TEOS, col 3 lines 25-27)

Contradict to Applicant's argument on page 11, Wang et al ('735) discloses the claimed method of claims 1-4, 10-16. Wang et al teaches forming an inorganic dielectric layer (SiOF -- silicon dioxide being doped with fluorine, layer 14, fig 2) to define a via dielectric layer over the barrier layer, the inorganic dielectric layer being highly selective relative to the barrier layer when being etched (see fig 8 wherein the inorganic dielectric layer 14 to define a via dielectric layer is selective etched with respect to the barrier layer 12) and forming a low dielectric layer (organic low k dielectric BCB, layer 18) to define a trench dielectric layer over the inorganic dielectric layer. Therefore, Wang ('735) teaches each and every feature of Applicant's claimed invention.

Contradict to Applicant's argument on page 11, Wang et al ('577) teaches the low dielectric constant trench layer (30, e.g. BCB, fig 7, col 5 lines 63-67 and col 6 lines 1-2) over an inorganic dielectric via layer (24, silicon dioxide, fig 3, col 5 lines 32-35) wherein the inorganic dielectric layer being highly selective to the barrier when being etched. Therefore, Wang ('577) teaches each and every feature of Applicant's claimed invention.